

Visual Studio 2015 Developer Enterprise Features

Duration	2 days Version 2015
Skill level	Intermediate
Audience	Experienced developers
Products	The following product and technologies will be covered in this course
and	Visual Studio 2015 Enterprise Edition
technologies	 Team Foundation Server 2015 or Visual Studio Online

Course Description

Many developers have been using Visual Studio for many years and continue to use the same features they have always used. This 2-day course is designed to educate developers on many of the features available in Visual Studio 2015 Enterprise edition that could greatly improve their code quality and productivity.

The Enterprise Edition is the "fully loaded" edition of Visual Studio and includes features that can improve your code testing including the Fakes Framework and IntelliTest. There are also many new features to improve debugging and troubleshooting your code including IntelliTrace as well as the Performance and Diagnostics Hub. Finally we'll take a look at Code Visualisation and some of the modelling tools available to you.

This course includes hands-on labs to reinforce practical skills and ensure you're ready to use the tools on your return to your workplace.

Team Foundation Server/Visual Studio Online

This course is equally applicable for teams using either Visual Studio Online or and on-premises Team Foundation Server.

Previous versions of Visual Studio

This course is suitable for attendees that are currently using Visual Studio 2013 Ultimate Edition. Many of the features covered are available in Visual Studio 2013 Ultimate.

Course Objectives

At the completion of this course, attendees will be able to;

- Understand the features available in Visual Studio 2015 Enterprise Edition
- Create work item charts and customise the Team dashboard
- Improve Unit Testing through the use of the Fakes Framework
- Use Code Coverage to help assess Unit Test coverage





- Use the new IntelliTest feature to increase test coverage
- Understand how to use IntelliTrace to fault find more efficiently
- Use the stand alone IntelliTrace collector
- Utilise the Performance and Diagnostics Hub
- Analyze application usage of CPU, Memory and Network resources
- Create and use Code Maps to visualise code for a better understanding
- Create basic application models including layer diagrams
- Request and track stakeholder feedback

Audience

This course is designed for experienced .NET developers.

Pre-requisites

Attendees are expected to be proficient developers with over 2 years experience using Visual Studio to develop .NET applications.

Modules

Module 1 - An overview of Visual Studio 2015

- A look at the Visual Studio 2015 family
- Visual Studio Online
- A lap around the Visual Studio 2015 Enterprise features

Module 2 - Working with Work Items

- A review of Work Items and Work Item queries
- Creating Work Item Charts
- Configuring the Team home page

Module 3 - Improving code quality with Unit Testing

- Review of writing and run unit tests
- Using Code Coverage
- Installing Third-Party Unit Test Frameworks
- Introducing Microsoft Fakes
- Using Stubs and Shims
- Optimizing the generation of Fakes
- Enhancing our Unit Testing using IntelliTest

Module 4 - Getting started with IntelliTrace

- What is IntelliTrace?
- Where does IntelliTrace fit in?
- The new IntelliTrace UI experience
- Living debugging using F5
- Understanding symbol files





- Configuring IntelliTrace options
- Using the standalone collector

Module 5 - Diagnostic Tools

- What are the Diagnostic tools?
- Navigating the Performance and Diagnostics hub
- Analyzing UI responsiveness
- Analyzing CPU usage
- Analyzing Memory usage
- Analyzing Network usage

Module 6 - Understanding your code better

- Map dependencies across your solutions
- Debug your application using code maps
- Using code map analyzers

Module 7 - An overview of modelling tools

- Creating Layer diagrams
- Creating models for your application
- Modelling your application architecture

Module 8 - Enhancing stakeholder feedback

- Introducing the Microsoft Feedback Client
- Using the Microsoft Feedback Client to provide rich feedback to the team
- Adding continuous feedback into your workflow

Module 9 - Summary of other Enterprise Features

- An overview of the testing tools¹
- An overview of Release Management²

² This is covered extensively in our "DevOps using Visual Studio ALM 2015" course



All of our public classes can be attended either in-person or remotely, online from anywhere.



In addition to our public schedule of courses, all ALM-Training courses can be delivered onsite for your company.



Web: http://www.alm-training.com Email: enquiry@alm-training.com

Twitter: @ALMTrainer



Phone: 07 3188 5452 (Australia) Toll-free: 1800 ALM4US (256487)

Overseas: +61 7 3188 5452



¹ This is covered extensively in our "Software Testing with Microsoft Test Manager" course